

## **SOCIO ECONOMIC FACTORS INFLUENCING MOBILE BANKING ADOPTION IN THE SELECTED COMMERCIAL BANKS OF NIGERIA**

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### **ABSTRACT**

Mobile banking has marked itself as an emerging technology adopted by banks around the globe and is expected to improve financial transaction in Nigeria. The paper aims to identify the key socio economic factors influence on consumer willingness to use mobile banking in Nigeria. The study was carried out in Abeokuta, Ogun state with One hundred and Fifty (150) Questionnaires administered and distributed to both senior & junior staff of the selected quoted banks, Ten (10) staff each was picked from the fifteen (15) selected banks. Data collected was analysing using frequency and simple percentage while regression analysis was used to test the formulated hypothesis. The result of the findings reveals that socio economic characteristic such as Age, Customer Income, Level of education and Position are the major Socio economic factors influencing mobile banking adoption in the Nigeria commercial banks. The overall results of tested hypothesis indicate that all the identified Socio economic factors have significant influence on mobile banking adoption in the commercial banks of Nigeria. At ( $F= 11.652$ ,  $P<0.05$ ); ( $R^2 = 0.576$ ); ( $Adjusted-R^2=0.563$ ) which confirmed the significance of the model.

**KEYWORDS:** Mobile Banking System, M-Banking Adoption, Socio-Economic Factors, Commercial Banks, Nigeria

### **INTRODUCTION**

The mobile and wireless market has been one of the fastest growing markets in the world. According to the Mobile phone Association and Ovum, the number of mobile subscribers exceeded 2 billion in September 2005, and now exceeds 2.5 billion (of which more than 2 billion are Mobile phone). Mobile banking in developing countries such as Nigeria started coming into light in the new millennium after the introduction and acceptance of mobile phone. The relationship between mobile banking and mobile phone are mainly used to provide mobile banking service. The technologies generally used for mobile banking are Interactive Voice Response (IVR), Standalone Mobile Application Clients, Short Messaging Service (SMS) and Wireless Application Protocol (WAP). Mobile banking will eventually allow users to make payments at the physical point of sale. "Mobile contact less payments" will make up 10% of the contact less market by 2010. Many believe that mobile users have just started to fully utilize the data capabilities in their mobile phones. In Asian countries like India, China, Bangladesh, Indonesia and Philippines, where mobile infrastructure is comparatively better than the fixed-line infrastructure, and in European countries, where mobile phone penetration is very high (at least 80% of consumers use a mobile phone), mobile banking is likely to appeal even more. This opens up huge markets for financial institutions interested in offering value added services. With mobile technology, banks can offer a wide range of services to their customers such as doing funds transfer while traveling, receiving online updates of stock price or even performing stock trading while being stuck in traffic. Mobile devices, especially smart phones, are the most

promising way to reach the masses and to create “stickiness” among current customers, due to their ability to provide services anytime, anywhere, high rate of penetration and potential to grow. There centtactics by Central Bank of Nigeria (CBN) on how larger proportion of currency in circulation can be captured within the banking system through cashless policy of the Nigerian government has been a subject of concern to researchers and other players in commerce. The usefulness of any particular electronic product to an individual is an increasing function of the number of individuals who already use and accept it in executing transactions.

According to Oladejo and Yinus (2014) technological payment System is modern and as good as standard of Developments in Nigeria. Evidence from literature (Agboola, 2006; Ayo, 2006; Adewoye, 2013; Aker, 2007; Salawu & Salawu, 2007; Oladejo and Yinus, 2013) observed that commercial banks in Nigeria have adopted different form of E-banking product. E-banking is normally influenced by a number of factors which include Socio economic characteristics. According to (Al-Somali , Gholami and Clegg 2008) Socio economic characteristics such as level of education, Age, Gender, Position, income of consumer and experience are known as important factors in technology adoption research and have always been key indicators and predictors of technology use.

This paper remains germane by investigate the socio economic factors influence on mobile banking adoption in the commercial banks of Nigeria.

### **Research Hypothesis**

**H<sub>01</sub>:** Socio economic factors like age, gender, level of education, position and income have no significant influence on Mobile banking Adoption in the Commercial banks of Nigeria.

**H<sub>02</sub>:** There is no significant relationship between socio economic factors and mobile banking adoption

### **LITERATURE REVIEW AND CONCEPTUAL CLARIFICATION**

The promise of Technology in the banking sector has been seen in terms of its potential to increase customer base, reduce transaction costs, improve the quality and timeliness of response, enhance opportunities for advertising and branding, facilitate self- service and service customization, and improve customer communication and relationship (Garau, 2002). Most banks in developed and some in developing parts of the world are now offering e-banking services with various levels of sophistication. However, most African banks seem to be content with having a Web presence with only a few of them making strides towards full-fledged e-banking applications.

More recently, as new data were made available and new methodologies were applied, empirical investigations have found evidence that Technology is associated with Development, in intermediate measures and in economic growth. More importantly, with the emergence of the mobile banking, customer focus has to be presented on the mobile electronic facilities platform. A key component of improving customers focus is the implementation of tools that allow development of better relations between banks and their customers (customer bank relationship). The banking industry today is witnessing heavy IT revolution to the extent that Customers now have freedom to pay bills; plans payments while held in traffic jams, receive updates on banks transaction other. Researchers at all spheres of the world had contributed in varied degrees to the existence of mobile banking and its originality into servicing customers effectively. Those scholars have evaluated some of the services mobile banking can offer. Such services include;

- **Account Information:** Mini statements and checking account history, Alerts on account activity or passing of set thresholds Monitoring of term, deposits Access to loan statements, Access to card statements Status on cheque, stop payment on cheque
- **Payments and Transfers:** Domestic and international funds transfer, Micro-payment, handling Mobile recharging
- **Investments:** Portfolio management service, Real-times to ck quotes, Personalized alerts and notification on security prices and etc

Banks are focusing increasingly on their e-banking activities, and are globally expanding electronic banking activities exploring the use of wireless networks and venturing into some new areas of electronic commerce. Banks offer e-banking services to defend or expand market share or as a cost saving strategy to reduce paperwork and personnel. The internet also provides banks with sustainable opportunity to extend their customer reach beyond existing boundaries.

### **Challenges of Mobile Banking in Nigeria**

Mobile phone operability: There are a large number of different mobile phone devices and it is a big challenge for banks to offer mobile banking solution on any type of device. Some of these devices support Java ME and others support s Application Toolkit, a WAP browser, or only SMS. Initial interoperability issues however have been localized, with countries like India using portals like R-World to enable the limitations of low end java based phones, while focus on areas such as South Africa have defaulted to the USSD as a basis of communication achievable with any phone. The desire for interoperability is largely dependent on the banks themselves, where installed applications (Java based or native) provide better security, are easier to use and allow development of more complex capabilities similar to those of internet banking while SMS can provide the basics but becomes difficult to operate with more complex transactions.

Security on transactions: Security on financial transactions, being executed from some remote location and transmission of financial information over the air, are the most complicated challenges that need to be addressed jointly by mobile application developers, wireless network service providers and the banks' IT departments.

### **METHODOLOGY**

Currently, there are 20 commercial banks in Nigeria, 15 Quoted and 5 Unquoted (CBN, 2012). All these banks will make up the population this research. The study will focus on all the fifteen quoted banks for the purpose of the study in Abeokuta, Nigeria. These fifteen banks are expected to have fulfilled listing requirement and thus disclosure of relevant information for the study. The sampling frame of this study comprises of both senior and junior staff in the relevant departments of the fifteen selected quoted banks in Abeokuta, Ogun state Nigeria. Abeokuta is the state capital of Ogun state and was chosen being a gate way centre for business types in Nigeria such as industry and services, even as part of state selected for earlier experimental cashless policy implementation centre. (CBN, 2012). The selection of banks was done using purposive sampling while bank staffs were selected at random. One hundred and fifty (150) Questionnaires were administered and distributed to the staff of the selected banks, Ten (10) staff each was picked from the fifteen (15) selected banks. The major instrument used in the collection of data for this research work was questionnaire. The questionnaire consists of questions that are related to Socio economic factors and effective mobile banking system. Likert five point scales ranging from 1-5(1=strongly disagree&5=strongly agree) were used as a basis of the questions. Data

collected was analysed using frequency and simple percentage while regression analysis was used to test the formulated hypothesis

## RESULTS AND DISCUSSIONS

### Responses on Socio Economic Factors Influence on Mobile Banking Adoption

Table 1 shows the analysis of socio economic factor influencing mobile banking adoption in the Nigeria commercial banks as deduced from bank staff. The result shows that (80%) of bank workers opined that Age has influence on mobile banking adoption. Also (58.7%) are of the opinion that Customer incomes are part of socio economic factor influencing adoption of mobile banking. Furthermore, (77.3%) of the respondent opined that level of education are one of the major Socio economic characteristic influencing adoption of mobile banking. (66%) of the bankers opined that position is part of socio economic factor influencing adoption of mobile banking in the Nigeria commercial banks. On the other hand, the respondent believe that socio economic factor such as Gender and Marital status has no influence on mobile banking adoption in the commercial of the Nigeria with 67.3%, 58% respectively. The results overview reveal that the respondent believed that Age, Customer Income, Level of education and Position are the major Socio economic factors influencing mobile banking adoption in the Nigeria commercial banks. This result support the argument of (Laukkanen et al, 2007; Amin et al, 2008; Puschel et al, 2010; Barriya and Singh, 2012; Adeoti et al, 2013) that socio economic characteristic influence the electronic banking product adoption both in developed and developing country.

**Table 1: Responses on Socio Economic Factors Influence on Mobile Banking Adoption**

S/N	Variables	SD	D	U	A	SA
1	Age	10 (6.7)	6 (4.0)	14 (9.3)	58 (38.7)	62 (41.3)
2	Customer Income	17 (11.3)	25 (16.7)	20 (13.3)	48 (32.0)	40 (26.7)
3	Level of education	14 (9.3)	4 (2.7)	16 (10.7)	66 (44.0)	50 (33.3)
4	Position	21 (14.0)	20 (13.3)	10 (6.7)	23 (15.5)	76 (50.5)
5	Gender	66 (44.0)	35 (23.3)	8 (5.3)	21 (14.0)	20 (13.3)
6	Marital status	49 (32.7)	38 (25.3)	16 (10.7)	25 (16.7)	22 (14.7)

*Note: the bracket Figures indicate the percentage & figure not bracket indicate the frequency*

**Source:** field survey, 2015

### Regression Analysis of Socio Economic Factors Influence on Mobile Banking Adoption

The results of the regression analysis as displayed in the Table II below revealed that a unit increase in all identified socio economic factors increased mobile service by (2.5units, 3.4units, 3.9units, 1.6units, 3.9 units) respectively. The coefficient of determination ( $R^2 = 0.576$ ) indicate that the entire identified variable jointly explained about 58% to variation in socio economic factors influencing mobile banking adoption. Also the high value of (**Adjusted- $R^2=0.563$ ,  $P<0.05$** ) support the significant moderate, positive relationship between the influencing factors and mobile banking adoption. Considering the impact of each of the identified socio economic factors on mobile banking adoption, the effect of each factor on M-banking adoption was significant at 0.05 level except Marital status ( $t= 1.375$ ,  $p>0.05$ ). All the identified influencing factors had positive relationship with mobile banking adoption except marital status. The overall result of the

regression analysis indicate that all the independent variables incorporated into this model have been able to reveal that Socio economic factors have significant influence on mobile banking adoption at ( $F= 11.652, P<0.05$ ), ( $R^2 = 0.576$ ) and ( $Adjusted-R^2=0.563$ ).due to the result the null hypothesis is rejected while the alternative hypothesis is accepted. Therefore socio economic factors: age, marital status, sex, education, income and position had significant influence on mobile banking adoption and usage in the commercial banks of Nigeria.

**Table 2: Regression Analysis of Socio Economic Factors Influence on Mobile Banking Adoption**

Variables	B	Std. error	Beta	T	Sig. T
Level of education	2.574	1.085	.165	2.373	0.19
Customer Income	3.402	.951	.260	3.576	.000
Age	3.911	1.167	.261	3.350	.001
Marital Status	1.632	1.187	1.71	1.375	1.71
Gender	3.938	1.139	.350	3.457	.001
Constant	-7.829	7.639	-	-1.025	.307
<b>R<sup>2</sup>= 0.576</b>	<b>Adj-R<sup>2</sup>=0.563</b>	<b>F=11.652</b>			

Source: field survey 2015

## CONCLUSIONS AND RECOMMENDATIONS

From the findings of the present study, the adoption of Mobile banking has improved Nigeria’s banking system. This is obvious in terms of number and intensity of mobile banking Usage during the sampled period. Generally, the key Socio economic Factors influencing mobile banking adoption are Level of Education, Customer Income, Age, and Gender. Also the result of the tested hypothesis buttress the significant influenced of socio economic factors on mobile banking in the commercial banks of Nigeria.

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